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User manual

DEHACO FEMTO

NEBULISER

Specifications-Safety-Use-Maintenance

ATTENTION!
All persons involved in the initialisation, operation, maintenance and repair of this product should receive a copy of these instructions!

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Translation of "Original user manual"

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01-2010

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1. Introduction

Many thanks for the purchase of the DEHACO FEMTO nebuliser. Consequently you own a state of the art unit that you, if used correctly, can operate for years without breakdowns.

The following symbols and attention texts are used in this manual:

WARNING!!!

This text provides information relating to safety!! Non compliance can result directly inphysical injury and/or damage to the machine!!

ATTENTION!

This text provides instructions, tips and information for optimal use!

This manual is intented to familiarize you with the operation, to give instructions for safe use and guidelines for regular maintenance.

The Dehaco FEMTO nebuliser has been delivered completely assembled and tested, ready to use. The delivery includes a) the machine, and b) this manual.

Check immediately at the delivery if the machine is complete and intact. If parts are missing or if there is transport damage, take directly contact with your supplier!!

This user manual, the name-plate and the stickers on the nebulisator contain important information and are as such part of the deliverye.

In case of damage or loss these should be replaced or obtained once again. All parts can be delivered subsequently by Dehaco BV.

ATTENTION!

Make sure you know the content of this manual before starting the activities, so that you canoptimal use the machine.

2. Description

The Dehaco FEMTO has been developed for very small-scale applications. The FEMTO is an extremely compact unit used to produce a very fine water spray to control dust during small-scale indoor demolition and renovation projects.

By forcing a small amount of water at high speed through a swirl chamber nozzle, water droplets are ‘pulled apart’ to produce a fine mist that can be dispersed by a blower up to seven metres.

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3. Intended use

The Dehaco FEMTO nebulisator:

- is used to produce a water spray and to disperse this spray, binding with dust and reducing the amount of dust in the air during demolition and renovation projects.
- is to be used with clean tap water.
- is intended for use in small indoor spaces.
- is intended for use by qualified persons.

WARNING!!!

The DEHACO FEMTO is NOT suitable for use in areas where there is a danger of axplosion!!!

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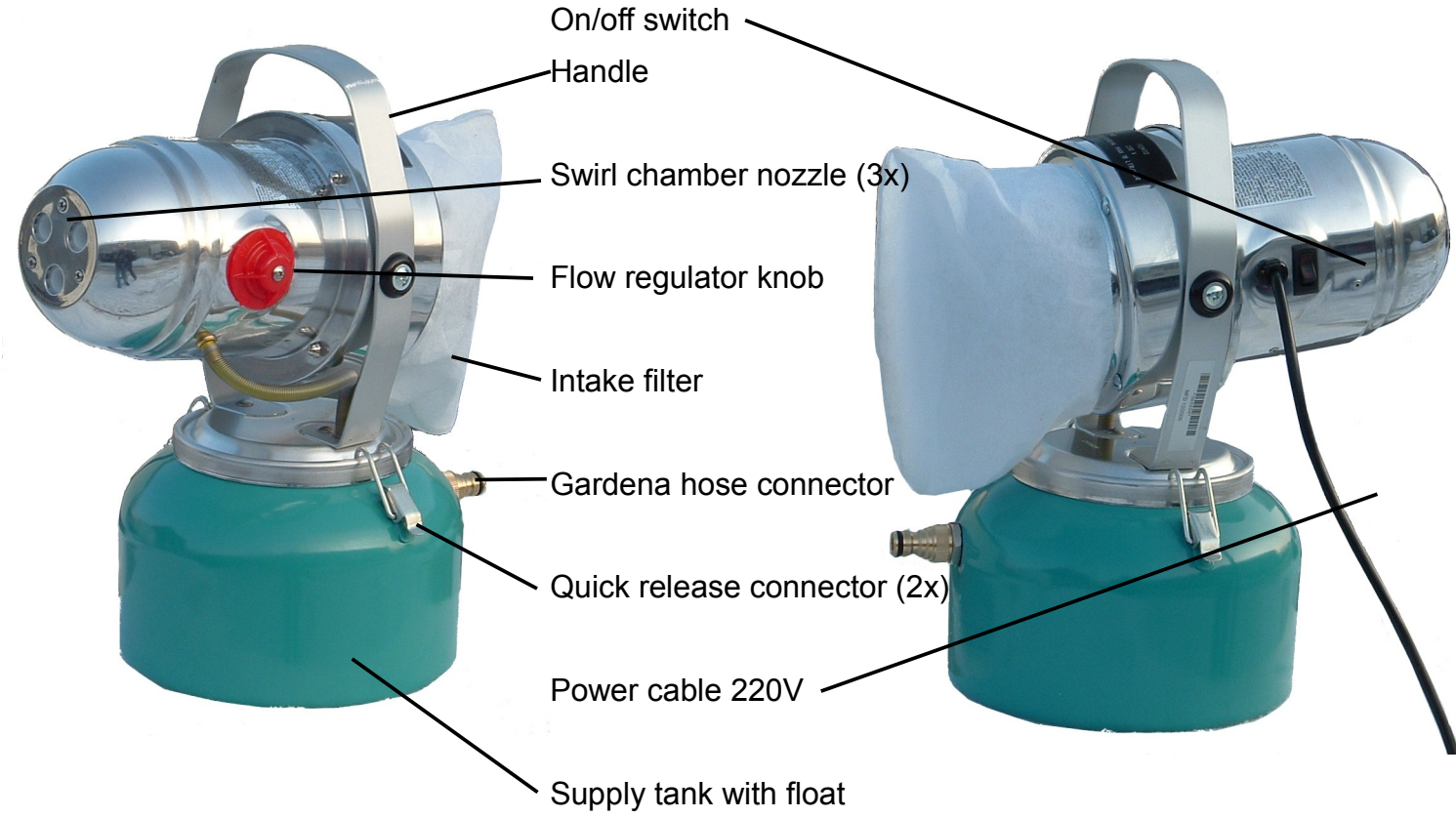
4. Technical specifications

- Voltage..... 220 V-50 Hz
- Power..... 700 W (3,5 A)
- Dimensions……. (lxhxdiam) 320x390x220 mm
- Water connector….. Gardena quick release connecto

- Water flow rate…..... 0-18 ltr/hr (continually variable)
- Droplet size.....15-30 µm
- Spray range..... ca. 7 metres
- Supply tank..... 4 litre volume, with float
- Intake filter.....cloth filter, fits over casing. Washable cloth
- Casing.....Aluminium
- Weight (empty). ……approx. 6 kg

5. Part names



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6. Safety

WARNING!!!

Almost all accidents accidents are a result of:

loss of concentration, inattention,

negligence and/or wrong estimations!

Work calmly and concentrated!

You have been warned!

ATTENTION!
You must under all occurring circumstances also follow up the safety instructions from the user manual and the local instructions!!!

WARNING!!!

There exists imminent danger of bodily injury and damage to the machine as a result of inexterienced, incompetent or careless use!!

Keep bystanders at a safe distance when working!!

a) Ensure that your work area is clean and well lit. An untidy and/or poorly lit work area can result in accidents.

b) Do not use the equipment in areas where there is a danger of explosion. Electrical equipment produces sparks which may ignite the dust or vapours.

c) Keep children or other persons away from the area when the equipment is in use. You may lose control of the equipment if you are distracted.

d) Do not use any equipment if you are tired or under the influence of drugs, alcohol or medication. A moment of inattentiveness when using the equipment can result in serious injury and/or damage to the equipment or surroundings.

e) Wear suitable clothing. Do not wear any loose clothing or jewellery. Keep hair, clothing and gloves out of the way of moving parts. Loose clothing, long hair and jewellery may interfere with moving parts.

f) Ensure damaged parts are repaired before use. Many accidents are due to poor maintenance.

g) In addition to the general rules given above, you should also be aware of local working conditions and regulations.

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7. Storage

The following actions should be taken if nebulisator is not to be used for a long time:

- Empty the supply tank.
- Switch the FEMTO on until no more spray is produced.
- Clean and dry the unit
- Store the unit in a clean, dry area.

8. Switching the unit on

WARNING!!!

Always use a plug socket or extension lead that is properly earthed!!

ATTENTION!

First flush out the hose before connecting it. This is to prevent any dust or grit in the hose causing the spray unit to become dirty and/or obstructed.

WARNING!!!

Replace leaking hose connectors immediately:
leaking water make the working area dirty and, in combination with electricity, can lead to dangerous situations!

1. Ensure that the supply tank and sealing rings for both connectors are properly secured.
2. Place the Dehaco FEMTO close enough to the work area but not so close that it gets in your way or can be hit by falling objects.
   Ensure it is placed on a flat, stable surface.
3. Clean the hose connector, flush out the hose and connect it.
4. Place the plug in the plug socket.
5. Switch on the spray unit using the black switch.
6. Adjust the spray volume using the red knob.
7. Aim the spray in the required

ATTENTION!

Make sure that the hose does not get wrapped around the Femto.

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9. Turning the unit off

1. Turn the FEMTO off using the black switch.
2. Remove the plug from the plug socket.
3. Turn off the water at the tap and disconnect the hose.

10. Transport

WARNING!!!

Avoid damage! Always be careful when transporting the Dehaco nebuliser!

When transporting the nebuliser always secure with enough tension straps!

11. Preventing legionella

Legionella is a bacterium that can cause Legionnaire's Disease. Infection can occur by inhaling the bacteria in very small water droplets dispersed in the air (by showers, spray units or whirlpools). The bacteria can grow at temperatures of 20º-50ºC in standing water.

Simple basic prevention measures are:

- always use clean tap water.
- flush out the hose before connecting it.
- always ensure the Dehaco FEMTO tank is completely empty after use, certainly if it is to be stored at a temperature above 20ºC.

WARNING!!!

DEHACO here draws your attention to the possibility of legionella. You, the user, are responsible for the prevention of legionella!!!

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12. Maintenance

WARNING!!!

Always remove the plug from the socket before carrying out any inspection, maintenance or reparation work on the unit!!!

Daily

- Inspect the unit visually for damage.
  Repair damage, however slight, immediately, or have it repaired.
  This is for your safety and to maximise the life of the machine.
- Be sure to also inspect the electricity cable.
  If damaged, remove it immediately and have it repaired.
  Your safety comes first!
- Check the filter. Replace/clean the filter if very dirty.

  The filters are washable, but be sure to dry them thoroughly before using them again!

ATTENTION!

Clean carefully!!! Never use a high pressure cleaner!

13. Trouble shooting

WARNING!!!

Repairs must be carried out by appropriately qualified personnel only, using original spare parts. This ensures the continued safety of the equipment!!!

1) The motor bearings are noisy/not running smoothly.
   Replace the bearings. Mount using a liquid thread locker.
2) The ventilator will not start
   No voltage: Turn on power */ turn on regulator / replace fuse.*
   Voltage present: Carbon brush worn*: replace.*
3) Nebulisator is not receiving water.
   Check: the position of the red regulator knob / the water supply / the float.
   Check that the intake hose is not dirty.

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14. End of economic lifetime

ATTENTION!

Get informed (at the local authorities) about the current requirements and guidelines for responsibledischarging!

Electrical tools, accessories and packaging have to be reused in an environmentally sound manner.

15. Warranty

A guarantee applies to the Dehaco FEMTO for a period of six months following delivery, in accordance with the *Metaalunie* conditions. Within this period and following an assessment made by Dehaco BV, only material faults and factory faults may be repaired free of charge. Transport and/or travel costs are the responsibility of the customer.

No warranty is given for defects that are a result of:
- the equipment having been overworked
- the equipment having been used for activities other than for those which it is intended
- poor maintenance
- the information given in these instructions not having been properly followed
- the equipment having been used by persons not qualified to do so
- the equipment having been repaired using non-original spare parts
- the equipment having been adapted without the written consent of Dehaco BV.

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16. CE Declaration of conformity

ACCORDING TO ANNEX II.1.A OF THE MACHINE DIRECTIVE 2006/42/EG

WE, Demto B.V.,
Steurgat 3a,
NL-4251 NG WERKENDAM

DECLARE ENTIRELY WITHIN THEIR OWN AREA OF RESPONSIBILITY THAT THE PRODUCT:

Brand: DEMTO
Model: FEMTO

TO WHICH THIS STATEMENT APPLIES, IS IN ACCORDANCE WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES:

Machine Directive	2006/42/EG
Low voltage Directive	2006/95/EG
EMC Directive	2004/108/EG

AND IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND/OR OTHER NORMATIVE DOCUMENTS:

EN – ISO 12100-1en -2	Safety of machinery
EN – ISO 14121-1	Risc analysis
NEN 5509	User manuals

DRAWN UP AT :

Werkendam, date: 11-01-2010

DEMTO B.V.
A.K.J.R. Horden.

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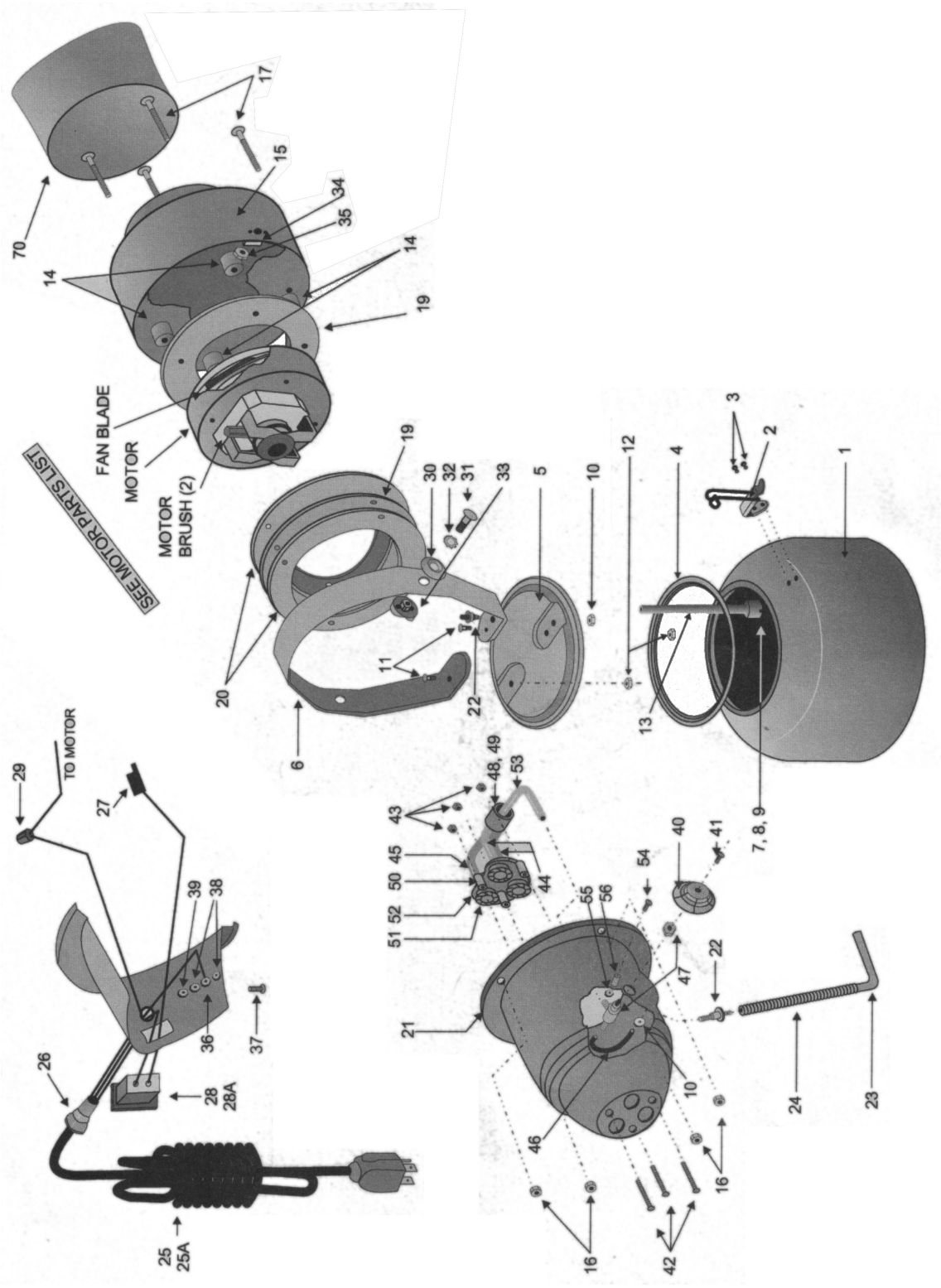
17. Spare parts

All spare parts required for maintenance or repair are available from your supplier.



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Dwg. Ref.....Kit No.	Description
1,2,3.....050	Tank w/Two Clamps
2,3.....205	Tank Clamp/Rivets
7,8,9,13.....051	Screen/Wt. Assm 5"
10,22.....052	Coupling Assembly
10,11,12,22.....053	Cover Plate Hardwar<
14.....065	Motor Spacer (set of 4)
16,17.....206	Housing Hardware (one set of 4)
27,28.....054	Switch,Toggle (round:
27.28A.....060	Switch, Rocker (rectangular)
30,31,32 33,34,35.....055	Trunion Hardware (one side)
37,38,39(or rivet).....056	Grounding Hardware
25A.27.29.....012	Cord Set, 240V 9 Ft.
42,43.....207	Venturi Mounting (set of 3)
44,45,48,49.....208	Venturi Assm
50,51,52,53	
40,41.....057	Knob w/Mounting Hrd'
40,41,47.....204	Adjustment Valve Asm w/ Knob & Hardware
36,37,38,39 220	Front Housing Assm 240V
40,41,42,43,44	
45,46,47,48,49,50,51,52,	
53,54,55,56	
5,6,10,11,12.....212	Rear Housing Assm
15,22,30,31 32,33,34,35	

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Dwg Ref.	partNo.	Description
4	021	Tank Gasket
5	200	Cover Plate
6	201	Trunion Bracket
15	202	Rear Housing
19	022	Torque Ring (one)
20	023	Motor Gasket (one)
21	203	Front Housing
23	024	Tube 8"x3/16x5/16
24	025	Armour Spring
26	026	Strain Relief
46	219	Tube 5"x3/16x7/16
70	081	Intake Filter (1)
70	080	Intake Filter (10)
	900	Tank Liners(IO)
	901	Tank Liners (50)
	001	Tubing, 3/16x5/16"
	002	Tubing, 3/16x7/16"
	241	Tubing Rcpl Kit